STATE OF NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS DIVISION OF CODES AND STANDARDS BUREAU OF CONSTRUCTION PROJECT REVIEW

- APPLICATION FOR PLAN REVIEW -



State of New JerseyJames E. McGreevey, Governor

Department of Community AffairsSusan Bass Levin, Commissioner

Intake & Admissions (609) 633-7448

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INTRODUCTION

The Department of Community Affairs, Division of Codes and Standards, Element of Construction Code Enforcement, Bureau of Construction Project Review, has prepared this comprehensive plan review application guide to assist applicants in the plan review and release process. The guide gives step by step instructions to the plan submittal process, including definitions for the various types of construction projects, check lists for both complete plan filings and partial filings, calculation worksheets for fee schedules, addresses, and telephone numbers if there are any questions.

In 1975, the State Legislature enacted the New Jersey Uniform Construction Code Act which established the Department of Community Affairs as the primary building codes and standards agency in the State. The Act provided for a single, mandatory construction code and for a fundamental restructuring of the enforcement process. Hence, the New Jersey Uniform Construction Code (UCC), N.J.A.C. 5:23, et seq., was adopted and became effective January 1, 1977.

When Department Review and Release is Required

Municipalities are delegated the bulk of the responsibility for enforcing the UCC, including performing plan reviews, issuing permits, inspecting construction, and issuing certificates of occupancy. However, the Department is required to perform plan review in municipalities where the subcode officials and construction official do not possess code enforcement licenses of the appropriate class. The construction class of the particular municipality can be obtained through either the municipality's construction office, administrative offices, or by calling Regulatory Affairs at (609)530–8838.

In accordance with the UCC, submission to the Department for plan review must be made if the proposed project is:

- Class I A Departmental plan review and release is required prior to the issuance of a construction permit unless the construction official and each appropriate subcode official in the municipal enforcing agency is certified as a HHS construction official or subcode official;
- Class II A Departmental plan review and release is required prior to the issuance of a construction permit unless the construction official and each appropriate subcode official in the municipal enforcing agency is certified as a HHS or ICS construction official or subcode official;
- Class III A Departmental plan review shall not be required except when the Department acts as the enforcing agency. Application should be made to the local construction office, not the Department.

In addition to the above categories, all plans for the following structures must be submitted to the Department for review and release:

- Electrical generating stations and substations, including nuclear;
- Incineration plants;
- Solid waste disposal plants;
- Public mausoleums, vaults, crypts and other structures intended to hold or contain human remains;
- Health care facilities as defined in N.J.A.C. 5:23-1.4;
- Public school facilities as defined in N.J.A.C. 5:23-1.4;
- State-owned structures, unless delegated to other agencies by memoranda of understanding;
- · Casino hotels; and
- All premanufactured systems for Class I and Class II structures, other than those authorized to be approved by an inplant inspection agency licensed to perform Class I and Class II plan review, and all on-site installation of Class I and Class II premanufactured construction within the jurisdiction of a local enforcing agency that is not a Class I or Class II agency.

Once a release—either partial or complete [see page 4]—is obtained from the Department's Bureau of Construction Project Review, the municipalities will issue the appropriate permit(s) and perform inspections so that construction may ensue.

The Uniform Construction Code

The New Jersey Uniform Construction Code (N.J.A.C. 5:23 et seq.) consists of a series of regulations that govern the construction process in the state. All aspects are covered, with subchapters on administration and enforcement; duties, powers and procedures of the various enforcing agencies; licensing of code enforcement officials; rehabilitation; barrier–free requirements; asbestos hazard abatement; radon hazard; and elevator safety. The UCC also adopts certain national model codes, called subcodes, to be an integral part of these regulations. Each subcode covers a specific technical area of construction activity. The subcodes and the sections that adopt them are as follows:

Subcode	National Model Code	UCC Reference
Building	Building Officials and Code Administrators (BOCA)National Building Code/1996	N.J.A.C. 5:23–3.14
Plumbing	National Standard Plumbing Code/1996	N.J.A.C. 5:23–3.15
Electrical	National Electrical Code/1999	N.J.A.C. 5:23–3.16
Fire protection	Portions of building, mechanical and electrical subcodes. See indicated UCC reference for specific information/sections	N.J.A.C. 5:23–3.17
Energy	BOCA National Energy Conservation Code/1993	N.J.A.C. 5:23–3.18
Mechanical	BOCA National Mechanical Code/1993	N.J.A.C. 5:23–3.20
One and two family dwelling	Council of American Building Officials (CABO)/1995	N.J.A.C. 5:23–3.21
Rehabilitation	New Jersey Rehabilitation Subcode	N.J.A.C. 5:23-6
Barrier-free	New Jersey Barrier-Free Subcode (to include referenced standard CABO/ANSI A117.1/1992)	N.J.A.C. 5:23-7

In order to more fully understand the plan review process and what is required to secure a plan release, the applicant is referred to the New Jersey Uniform Construction Code. This "New Jersey Administrative Code," Title 5, Chapter 23, may be purchased from West Publishing Company, 610 Opperman Drive, PO Box 64526, St. Paul, MN 55164-0526. Telephone orders may be placed by calling the publisher at (612) 687-7000.

Copies of the referenced subcodes may be purchased from the following organizations:

Building Officials and Code Administrators International, Inc. (BOCA) 4051 W. Flossmoor Rd. Country Club Hills, Ill. 60478-5795

Referenced publications:

- BOCA National Building Code
- BOCA National Energy Conservation Code
- BOCA National Mechanical Code
- CABO One and Two Family Dwelling Code

The National Fire Protection Association (NFPA) Batterymarch Park Quincy, Mass. 02269

Referenced publication:

• The National Electrical Code (NEC)

The National Association of Plumbing-Heating-Cooling Contractors P.O. Box 6808 Falls Church, VA 22046

Referenced publication:

• The National Standard Plumbing Code (NSPC)

Council of American Building Officials 5203 Leesburg Pike, #708 Falls Church, VA 22041

Referenced publication:

• CABO/ANSI A117.1-1992

GENERAL INFORMATION AND INSTRUCTIONS

The applicant must complete a project review application for each project submission. One copy is included with this guide; additional copies may be secured from the Bureau upon request. For detailed guidance in its preparation, refer to instructions later in this section.

When making application for plan review, the applicant must determine certain information. Most importantly, the applicant has to decide which type of review process to request—complete or partial plan release. Consider the following points when deciding:

Complete Plan Release

A complete plan release may be requested when all plans, specifications, and fees are presented to the Bureau at the time of original project submission. The advantage of this is that all individual elements of the project can be coordinated and cross-checked for code compliance, reducing the possibility of last minute plan changes to correct errors across the various subcodes. Release(s) and/or written notice of rejection(s) will be forwarded to the applicant within twenty (20) business days of submission of a complete application. The following items are to be provided for consideration as a complete plan release:

- 1. One (1) complete set of plans is required to accompany the *original* project submission. *Two additional sets* will be required when the review is complete and ready for release. Each set should include, as appropriate:
 - Footings and foundations
 - Underslab utilities
 - Structural framework
 - Exterior building
 - Interior building
 - Plumbing
 - Mechanical
 - Electrical
 - Fire protection
 - Elevators
 - Complete specifications, calculations, soil reports as required
 - Site plans
 - Letter of barrier-free accessibility costs, for renovation and alteration projects
- 2. All plans, specifications, calculations, barrier-free cost letters, soil reports and piling information must be signed and sealed by a New Jersey registered architect or a New Jersey licensed engineer.
- 3. The project review application must specify a complete release is desired, and must be submitted with a volume calculation worksheet [see page 9] and the Plan Review Fee Schedule.
- 4. Plans will not be assigned for review and the 20 day clock will not begin to run until this office is in receipt of the required plan review fee. Checks should be rounded off to the nearest dollar and made payable to "Treasurer, State of New Jersey."

Partial Plan Release

Requests for partial plan release are generally submitted when the entire project is not fully designed and it is necessary to begin construction due to considerations such as weather, finance, local requirements, etc. Advantages of this procedure are that only fees for the particular release being requested need be paid, and additional work can be done to fine tune and complete plans not immediately required for construction. Disadvantages are that coordination of reviews is not possible and time may be lost in changing plans due to inconsistencies in submitted drawings. Each release request will be subject to either release or written notice of rejection within twenty (20) business days of assignment to the review team. In any case, no partial release will be issued until the fee for that release has been paid. The submission procedure for partial releases is as follows:

- 1. One (1) set of plans, signed and sealed, must accompany the original partial release submission. Two additional sets will be required when the reviews are complete and release is ready. For typical required details, refer to the appropriate check lists beginning on page 13 in this guide.
- 2. The project review application must indicate a partial release filing is desired. The particular partial releases to be submitted should be checked, along with an anticipated submission date of those not included in the

current filing. The submission schedule is important to assist the Bureau in scheduling the project through the review team and avoid delays. Also, the Plan Review Fee Schedule form must be included.

- 3. Fees should be calculated to cover only the partial release(s) requested. For new buildings and additions, the building construction fee and volume calculation worksheet are required for any or all of the following releases: footings and foundations; structural framework; exterior; interior; or mechanical release. Plumbing fee must be paid for a plumbing release; electrical fee must be paid for electrical release; fire protection and hazardous equipment fee is required for sprinklers, detectors, and other elements of the subcode as indicated on the fee schedules. For alterations, the construction cost fee must be paid to secure interior, exterior or mechanical releases. Other fee requirements are the same as noted above for new buildings and additions. In any case, all appropriate fees must be paid in order to secure a final release from plan review.
- 4. Please note that drawings submitted pursuant to a specific partial release should, to the greatest extent possible, contain only information related to that release. In any case, the Bureau's release stamp affixed to the drawings will indicate the applicable releases; permits or work on any other aspects of the drawing will not be authorized.
- 5. Specific requirements for each type of partial release are:
 - a. Footings and foundations release
 - Footing and foundation design drawings
 - Soil bearing analysis reports, signed and sealed; if pile foundation, provide test pile information, signed and sealed
 - Structural load calculations, signed and sealed, in compliance with the building subcode
 - It is strongly recommended that, in order to avoid complications further on in the review process, a full set of architectural plans preliminary or final be submitted at this time. The applicant will be advised by the Bureau of any changes that may be necessary for these architectural plans to conform to the code.
 - b. Underslab utilities release
 - Signed and sealed plans for underslab plumbing and electrical installation, as appropriate
 - c. Structural framework release
 - Structural framework plans, signed and sealed
 - Structural calculations, signed and sealed
 - d. Exterior building release
 - Architectural plans, signed and sealed, indicating site plan, sections, building elevations, other exterior details required to show code compliance as outlined in the attached check lists [see page 14]
 - e. Interior building release
 - Architectural plans, signed and sealed, indicating occupancy loads, floor plans with dimensions, all interior partitions and walls, including trim, finish, and door materials. Include details on means of egress, and other information indicated in the attached check lists [see page 14]
 - f. Plumbing release
 - Complete plumbing plans, signed and sealed
 - g. Mechanical release
 - Complete mechanical plans, signed and sealed
 - h. Electrical release
 - Complete electrical plans, signed and sealed
 - i. Fire protection release
 - Complete fire protection drawings, signed and sealed, that include system design and head locations; hydraulic calculations; water flow tests from an approved agency
 - Shop drawings are not required as long as sufficient details are provided to verify compliance with the Code

- i. Elevator release
 - Signed and sealed drawings refer to elevator check list on page 16 for specific items that must be included
 - Shop drawings are not required as long as sufficient details are provided to verify compliance with the Code
 - Completed Elevator Test and Inspection Fee Schedule [see page 10]
- 6. For construction of speculative buildings, all partial releases except interior building must be obtained. Tenant space fit-up work will be processed as a separate project, but it will be considered as an alteration to the speculative building. The tenant project number will be the same as the main building with the addition of an alphabetic suffix.
- 7. The holder of a partial release proceeds at his own risk, without assurance that a release for any other part or for the entire structure will be granted.
- 8. Final release is mandatory and can only be issued when all necessary drawings, fees, and other approvals have been secured and released.

Project Review Application

Once the type of review process has been decided, the applicant should proceed to complete the project review application. The following details are for specific areas on the project review application; refer to it as each item is detailed. **Note:** All of the shaded areas are for office use only. Do not enter any information in them.

- 1. Section 1 Project identification
 - Enter project name as it should be identified in the plan review, release and permitting process.
 - Enter the street address of the project.
 - Enter municipality where project is located do not indicate mailing address.
 - Enter county where project is located.
 - Enter block/lot numbers as per the official municipality map.
- 2. Section 2 Project type and filing method
 - Check the project type box(es) that apply for new construction and/or addition, change of use, repair, renovation, alteration or reconstruction.
 - Check the filing type box for either a complete or partial review release, as desired by the applicant. Note that if a partial release filing is requested, Section 4 must be completed according to instructions below.
 - If filing for a variation, check the variation box under filing type and request a variation application form from the Bureau.
- 3. Section 3 Project specifications
 - Fill in all spaces as applicable to the project structure.
 - Enter Use Group, as defined in the building subcode [see page 8].
 - Enter area of largest floor.
 - Enter gross area of building.
 - Enter total building volume (refer to volume calculation worksheet on page 9 for computation methods).
 - Specify number of stories.
 - Indicate maximum height of building.
 - Show construction type, as defined in the building subcode.
 - Enter the total cost of the project including all partial releases, even if they are not yet submitted.
 - If the project is for renovations or alterations to an existing building, enter that portion of the total project cost that is dedicated to improving barrier-free accessibility. This amount is not required if the project is for a new structure, an addition, or repairs.

Note: All items in this section will be compared with information shown on submitted drawings any discrepancies will be noted and may require resubmission of project review application and fee schedule.

4. Section 4 - Partial releases requested

• If the indicated filing type in Section 2 is for partial plan releases, the appropriate boxes for all anticipated releases must be checked. Also, if the plans for these releases are not included at this time, the applicant should indicate when they will be available, to assist the Bureau in scheduling the project through the review team.

5. Section 5 - Applicant information

- The applicant must be the owner or the owner's designated agent.
- Owner Name: enter name, address, and phone number of the individual, organization or governmental agency that is the titled owner of the project. Check the box next to this item if copies of all correspondence are to be forwarded to the owner.
- Owner's Designated Agent Name: Check the box, enter name, address, and phone number of the individual not organization if any, who is acting in behalf of the project owner and will be receiving all project related correspondence from the Bureau. It is not necessary to supply this information if the box next to the agent's name is not checked. Note: please do not list the architect/engineer of record as the owner's designated agent.
- Architect/engineer: enter name, address, firm name and phone number of the design professional responsible for preparation of drawings and specifications.
- Comments and partial releases will be addressed to the architect or engineer, with copies to either the owner or the owner's designated agent as specified on the form.
- The owner or owner's designated agent must sign the completed application, in ink, in the lower right-hand corner box. All unsigned applications will be returned for signature, thereby delaying the plan review process.

Plan Review Submittals

Completed project review applications, plans, fee schedules and other appropriate forms are to be submitted to:

<u>Via U. S. Mail:</u> New Jersey Department of Community Affairs Bureau of Construction Project Review

Intake & Admissions

PO Box 817

Trenton, NJ 08625 - 0817

Other Delivery Service:

New Jersey Department of Community Affairs

Bureau of Construction Project Review

Intake & Admissions

101 South Broad St. 4th Floor

Trenton, NJ 08608

Further assistance in the completion and processing of the enclosed forms may be obtained by calling Intake and Admissions at (609) 633-7448. Office hours are 9:00 a.m. to 5:00 p.m. Monday through Friday except holidays.

Healthcare review applications are to be submitted to:

Via U. S. Mail:

New Jersey Department of Community Affairs Bureau of Construction Project Review

Health Care Review

PO Box 817

Trenton, NJ 08625 - 0817

Other Delivery Service:

New Jersey Department of Community Affairs

Bureau of Construction Project Review

Health Care Review

101 South Broad St. 4th Floor

Trenton, NJ 08608

For more information, phone: (609) 633-8151

Public school review applications are to be submitted to:

Via U. S. Mail:

New Jersey Department of Community Affairs Bureau of Construction Project Review

Education Review

PO Box 817

Trenton, NJ 08625 - 0817

Other Delivery Service:

New Jersey Department of Community Affairs

Bureau of Construction Project Review

Education Review

101 South Broad St. 4th Floor

Trenton, NJ 08608

For more information, phone: (609) 633-0800

FEE CALCULATION INSTRUCTIONS

The following pages include the Plan Review Fee Schedule and the Volume Calculation Worksheet. The volume worksheet must accompany the Fee Schedule with your project review application for all new construction or additions. In case of both new construction plus renovations, a volume calculation worksheet for only the new construction must be submitted. The volume is used to complete section 1A of the Fee Schedule. Cost of alteration, renovation, and repair, if any, is used to complete section 1B of the Fee Schedule.

General Instructions

The following information is required on the project review application, and Section 1A of the Plan Review Fee Schedule:

Use Group (See building subcode, Article 3: Use or Occupancy)

- a. BBusiness
 EEducational
 HHigh hazard
 I-1Institutional, residential
 I-2Institutional, incapacitated
 I-3Institutional, restrained
 MMercantile
 R-1Residential, hotels
 R-2Residential, multi-family
 R-3Residential, 1 and 2 family
 R-4Residential, 1 and 2 family (CABO)
 UUtility and miscellaneous
- b. A-1 Assembly, theaters
 A-2 Assembly, nightclubs
 A-3 Assembly, lecture halls, restaurants
 A-4 Churches
 A-5 Grandstands, bleachers, stadiums
 F-1 Factory, moderate hazard
 F-2 Factory, low hazard
 S-1 Storage, moderate hazard

S-2 Storage, low hazard

c. Farm use buildings: Refer to N.J.A.C. 5:23 - 3.2(d) for specific information on applicability and requirements.

Plan Review Fee Schedule

Upon determining the use group and volume, proceed to the Fee Schedule and enter all required information. Only those items pertaining to the particular releases currently being sought need to be completed at this time. Please note that blank Fee Schedules may be duplicated and used for submissions of future projects, but the project review application must not be a duplicate.

Each section of the Fee Schedule contains instructions on how to complete it. If there is any question about fees for a particular subcode, please refer to N.J.A.C. 5:23 - 4.20 for more detailed information by discipline, request assistance when leaving plans for review, or call in advance [(609) 633-7448].

VOLUME CALCULATION WORKSHEET

In accordance with N.J.A.C. 5:23 - 2.28, "volume computation," the volume of the structure shall be calculated as follows:

) Height extending from basement or
ft.
ft.
sq. ft.
cu. ft.
ngs—not exceeding 2-1/2 feet below
ft.
ft.
sq. ft.
cu. ft.

Open sheds: (N.J.A.C. 5:23 - 2.28(d)) The volume shall be measured within the perimeter of the roof for a height from the grade line to the mean roof level.

February 7, 2000

DEPARTMENT OF COMMUNITY AFFAIRS

BUREAUS OF CONSTRUCTION PROJECT REVIEW AND CODE SERVICES

ELEVATOR SAFETY UNIT - TEST AND INSPECTION FEE SCHEDULE (New Construction or Alterations Only)

A. Structures other than Use Groups R-3 and R-4, or exempted R-2:			
ELEVATOR TYPE	FEE EACH	No. of Devices	$\mathbf{F}_{\mathbf{E}\mathbf{E}}$
Traction and winding drum elevators			
- 1 to 10 floors	\$243.00		\$
- Over 10 floors	\$405.00		\$
Hydraulic elevators	\$216.00		\$
Roped hydraulic elevators	\$243.00		\$
Escalators, moving walks	\$216.00		\$
Dumbwaiters	\$54.00		\$
Stairway chairlifts, inclined and vertice wheelchair and manlifts	eal \$54.00		\$
Oil buffers	\$43.00		\$
Counterweight governor and safeties	\$108.00		\$
Auxiliary power generator	\$81.00		\$
		SUBTOTAL PART A:	\$
B. Structures in Use Groups R-3 and	d R-4 and exem	pted R-2:	
Test and inspection fee	\$162.00		\$
		SUBTOTAL PART B:	\$
C. Alterations:	\$54.00	·	\$
		SUBTOTAL PART C:	\$
D. Are permits for work in other substruction office in relation to this property as \square		g, electrical, fire) being appli	ied for at the local con-
E. State Training Fee: (Complete O	only if "No" is c	hecked in Item D, above)	
Cost of alteration (elevator subcode or	nly) \$	X \$0.80 per \$1,000.00	= \$

Sum fees from Parts A, B, C, and E. Show total here and also on Plan Review Fee Schedule where "Total from Elevator Safety Unit Fee Schedule" is requested. Include this schedule with submission.

DEPARTMENT OF COMMUNITY AFFAIRS February 7, 2000 **Bureau of Construction Project Review** Plan Review Fee Schedule—Other than 1 and 2 Family Project No. 1. BUILDING FEES: A. NEW CONSTRUCTION & ADDITIONS: Use Groups B, H, I-1, I-2, I-3, Volume cu. ft. $\times .027 =$ M, E, R-1, R-2, R-3, R-4, U of Bldg. _ cu. ft. X .015 = Use Groups A-1, A-2, A-3, A-4, A-5, Volume_ F-1, F-2, S-1, S-2 of Bldg. Commercial Farm Buildings Volume _ cu. ft. $\times .0008 =$ Maximum fee not to exceed \$1,145.00 of Bldg. B. RECONSTRUCTION, ALTERATION, RENOVATION, REPAIR: (The applicant shall submit cost data by architect or engineer of record, a recognized estimating firm, or by contractor bid. The Department will review the construction cost for acceptability.) Renovation Cost: (Building & Mechanical Work Only!) \$24.00 per \$1,000 = Estimated cost up to and including \$50,000.00 plus Portion of cost \$50,001.00 Additional fee of \$18.00 per \$1,000 =to and including \$100,000.00 plus Portion of cost above Additional fee of \$15.00 per \$1,000 =\$100,000.00 C. TENTS (In excess of 900 sq. ft. or more than 30 feet in any direction): fee is \$92.00 D. SWIMMING POOLS: Above ground greater than 550 sq. ft., fee is \$100.00; all other \$50.00 In-ground greater than 550 sq. ft., \$150.00; all other \$75.00 2. PLUMBING FEES: Total number of plumbing/gas/oil piping fixtures*: _ X \$10.00 ea. =*Fixtures to include all fixtures and appliances connected to the plumbing, oil or gas piping system except as listed below. Total number of special devices**: X \$65.00 ea. =**Special devices include grease traps, oil separators, refrigeration units, utility service connections, back flow preventers equipped with test ports (double check valve assembly, reduced pressure zone and pressure vacuum breaker backflow preventers), steam boilers, hot water boilers (excluding those for domestic water heating), active solar systems, sewer pumps, and interceptors. 3. ELECTRICAL FEES:* a and b: Receptacles, fixtures and devices to be counted for these parts are lighting fixtures, wall switches, convenience receptacles, sensors, dimmers, alarm devices, smoke and heat detectors, communications outlets, light standards 8 ft or less in height including luminaries, emergency lights, electric signs, exit lights or similar electric fixtures and devices rated 20 amps or less including motors or equipment rated less than 1 hp or 1 kw. Receptacles and fixtures -First 50: fee is \$36.00 = Increments of 25 additional X \$6.00 ea. = receptacles and fixtures c. Each motor or electrical device rated from 1 hp or 1 kw to 10 hp or 10 kw; for each transformer or generator rated from 1 kw or 1 kva to 10 kw or 10 kva; for each replacement of wiring involving one branch circuit or part; for each storable pool or hydromassage bathtub; for each underwater lighting fixture; for household electric cooking equipment rated up to 16 kw; for each fire, security or burglar alarm control unit; for each receptacle rated from 30 to 50 amps; for each light standard greater than 8 feet in height including luminaries; for each communications closet. --the fee is: X \$10.00 ea. = d. Each motor or electrical device rated from greater than 10 hp or 10 kw to 50 hp or 50 kw; for each service equipment, panelboard, switchboard, switchgear, motor control center or disconnecting means rated 225 amps or less; for each transformer or generator rated from greater than 10 kw or 10 kva to 45 kw or 45 kva; for each electric sign rated from greater than 20 amps to 225 amps including associated disconnecting means; for each receptacle rated greater than 50 amps; and for each utility load management device. X \$46.00 ea. = e. Each motor or electrical device rated from greater than 50 hp or 50 kw to 100 hp or 100 kw; for each service equipment, panelboard, switchboard, switchgear, motor control center or disconnecting means rated greater than 225 amps to 1,000 amps; for each transformer or generator rated from greater than 45 kw or 45 kva to 112.5 or 112.5 kva. --the fee is: X \$92.00 ea. = f. Each motor or electrical device rated greater than 100 hp or 100 kw; for each service equipment, panelboard, switchboard, switchbeard, motor control center or disconnecting means rated greater than 1,000 amps; and for each transformer rated greater than 112.5 kw or 112.5 kva. X \$457.00 ea. = --the fee is: * For specific information on fees for multimeter stacks, concurrent installation of components of motor controls, and process equipment, refer

to NJAC 5:23-4.20(c)2iii(8), (9) and (11) for details on fee applicability.

4. ST/	ANDPIPE FEE:	Number of sta	indpipes	X \$229.00=	\$
5. FIR	E PROTECTION & HAZARDO	US EQUIPMENT	FEE:		
a.	a. Sprinkler heads: • 1 - 20 heads = \$65.00 • 21 - 100 heads = \$120.00 • 101 - 200 heads = \$229.00 • Over 1,000 heads = \$1,050.00			00	
		Number of spr	rinkler heads:	Sprinkler Fee:	\$
b.	Detectors: for first 12, fee is \$3	6.00; for each group	of 25 in addition to this, fee	is \$12.00	
		Number of det	ectors:	Detector Fee:	\$
c.	Independent Pre-engineered sy	stems: Number of	systems	X \$92.00=	\$
d.	Gas or oil fired appliance which	n is not connected to	o the plumbing system:		
		Number of app	oliances	X \$46.00 =	\$
e.	Kitchen exhaust system:	Number of sys	stems	X\$46.00 =	\$
f.	Incinerators:	Number of inc	inerators	X \$365.00=	\$
g.	Crematoriums:	Number of cre	ematoriums	X \$365.00=	\$
6. SIG			re foot (\$46.00 minimum) de of double-sided signs.)	Sign fee:	\$
7. NOI	N-DEPLETABLE & ALTERNA	TE ENERGY SYS	TEMS (Solar Heating):		
Lig	tht commercial with one thermost All other structures:	at and R-3:	\$274.00 \$1,369.00		\$
8. FEE	ECALCULATION BASE (Sum	of above items 1 thr	rough 7):		\$
9. PL	AN REVIEW FEE - 25% of lin	ne 8:			\$
10. PI	LAN REVIEW SURCHARGE	- 40% of line 9:			\$
	EVATOR PLAN REVIEW FE 3 and R-4 Use Groups - \$50.00 per		Number of elevators:		
All	other Use Groups - \$260.00 per e	elevator	Number of elevators:		
			Total Elevator F	Plan Review Fee:	\$
12. EI	_EVATOR UNIT TEST & INSP	ECTION FEES:			
	Total Elevator Unit Test & Insp	ection Fees from fe	e schedule, enclosed:		\$
	RAND TOTAL OF ALL FEES mit check, rounded to nearest dol			in this amount:	\$

PLAN SUBMISSION CHECK LISTS

General Instructions

In following pages contain items grouped by release area that indicate the typical kinds of information to be submitted on plans and specifications. Please understand that these check lists are intended to be only a guide, therefore they will not be accepted in lieu of actual plans and specifications. In no way should they be considered all-inclusive; nor should it be assumed that every project requires all of the items included below. The lists have been developed from our experience as to what we havefound to be missing from submitted documents and are presented in an effort to simplify the sibmittal and review process. As a reminder, all plans, specifications, calculations, soil reports, piling information, etc., submitted for review must be signed and sealed by a New Jersey registered architect or licensed engineer [see page 4 for more information].

Footings and foundations

- 1. Fire lose soil engineer's report for foundation investigation that provides recommendations for bearing capacity and includes certified test pit / boring loss tion plans.
- 2. For pile foundations, enclose details for pile type, installed capacity, driving criteria, load test details for piles, as per the building subcode.
- 3. Enc lose foundation plan, foundation sections, and specifications of materials to be used.
- 4. Enclose a site diagram, showing to scale the location of the new construction.
- 5. For basements or other retaining walls below grade, enclose structural calculations and details of wall thickness, reinforcement, etc.
- 6. For column foundations / wall foundations, enclose a chart showing load calculations per floor to top of column / wall footing or top of soil.

Underslab utilities

- 1. Provide details of plurbing and/or electrical installation within or beneath main foundation slab. Only those items directly involved with plurbing and/or electrical work beneath the slab need be shown.
- 2. For electrical installations, specify the following items:
 - Depth of coverfrom top surface of conductor, abble, and it, or other raceway, to finished grade
 - Indicate grounding details as appropriate for slab installation
 - Specify under slab conductor sizes/types, and breaker sizes being supplied by them
- 3. For plurbing installations, provide the following:
 - · Snow all sanitary and storm drainage lines, indicating pipe size(s), slope, and materials used
 - Indicate point of dischargefor storm drainage systems
 - Show details of understab piping for domestic water and fire suppression systems, including pipe size(s) and materials

Structural framework

- 1. Enclose structural floor plans, roof plan showing sizes of members, and structural computations.
- 2. Enclose drawings showing correction details, and other technical data
- 3. Fortrusses / floor joists, enclose drawings showing details of sizes, design or iteriaforlive load / dead load forces in member, specifications for lumber, sizes of lateral braces, sizes of purlins, their maximum specings, and maximum deflection of members under working load.
- 4. For outer walls, provide calculations for horizontal wind load, justifying thickness of wall and size of reinforcement, if any.

5. Provide details for design criteria (live load / dead load , snow load , earthquake load , wind load) and specifications of material (steel, lumber, concrete reinforcing steel bars, etc.), indicating allowable stress.

Exterior building

- 1. Provide setback distance of building from lot lines or other structures on same lot on all sides.
- 2. Provide the firerating of exterior walls in hours; specify design/UL number (if rating is required).
- 3. Indicate accessible rate of travelina parking lot to front door, and details of ramps with indicated slopes, for compliance with the barrier-free subcode.
- 4. Provide elevations, exterior wall/building sections, and details on all exterior doors and windows.

Interior building

- 1. If mixed use, indicate exact location, occupancy load, and squaref cotage for these uses. Also show incidental uses, if appropriate.
- 2. If design is such that complete information cannot be shown on the project review application, indicate on plans all construction types, number of stories, and building heights.
- 3. Indicate door, window, and finish schedules on plans.
- 4. Provide thermal ratings of walls, ceilings, etc.
- 5. Provide the firerating of corridor walls, floors, ceilings, exit stainways, shafts, columns, girders, beams, and roofs in hours; specify design/LL number (if rating is required).
- 6. For residential use, show STC ratings of partition walls and ceilings.
- 7. Show exit calculations; indicate the number of exits provided per floor, and specify the maximum travel distance in feet.
- 8. Indicate interior accessible routes of travel and details of ramps with indicated slopes, for compliance with the barrier-free subcode.
- 9. Provide details on location of telephones, waterfountains, toilet rooms, laboratory and shop facilities, for compliance with the barrier-free subcode.
- 10. If a fire suppression system is required by the building subcode, verify that drawings comply with the fire protection subcode.

Plumbing

- 1. A site plan, showing plurbing lines into and out of the building to a distance five feet from the building line, must be submitted.
- 2. Include a sanitary drain and vertriser diagram, plan and elevation.
- 3. Include a fixture schedule listing each fixture, description, trap vert sizes, DFU valve, SFU valves, hot and cold water correction sizes.
- 4. Include materials specifications, or reference on the drawings for piping materials.
- 5. Show storm water piping system, noting squarefoot area served by each roof drain, piping size and pitch. Plumbing plans must show storm water lines and pitch from building to approved discharge outfall, public storm sewer, or site drainage system.
- 6. Include a hot and cold waterriserdiagram, showing size and SFU counts.
- 7. Cleanouts must be indicated and labeled in all drainage lines.
- 8 W all penetration sleeves should be indicated and details shown.
- 9. If a multi-story building riser diagram for cold water must correspond in format and contain information shown in Appendix B of the plumbing subcode.
- 10. Plumbing fixtures and elevations / details shall conform to the barrier-free subcode specifically fixture heights, spacing, etc.

Mechanical

- 1. Show calculation for vertilation air requirement based on occupant load (refer to mechanical subcode).
- 2. Include Cop / EER value of HVA Curits, boiler of ficiency, etc. Supply the required energy calculations.
- 3. Include specifications on duct construction and installation, such as supports, loads, etc.
- 4. Include schematics and details of hazardous exhaust in units such as laboratory hoods.
- 5. Provide manufacturer srecommendation information for laundry/dryerexhaust.
- 6. Show locations of all fire dampers
- 7. Include drawings for kitchen exhaust hood, duct and hood fire suppression system. Drawings must contain information required by the mechanical subcode and the fire protection subcode.
- 8. Include all details, specifications, and calculations (building, volume, airchange, riserdiagram) for smokeexhaust / control, stairpressurizations, etc., as applicable per building and fire protection subcodes.
- 9. Show details of all hydronic, gas, and fuel oil piping.
- 10. Include calculations for combustion air requirement.
- 11. Show all details of chimneys and verts.
- 12. Show machinery layout plan, equipment schedule, and details of the processes involved.
- 13. Show height of all mechanical controls, for compliance with the barrier-free subcode.

Electrical

- 1. Show details of all grounding, including:
 - · Grounding electrode system;
 - Distribution grounding;
 - Transformer grounding if needed, show how neutral is established from transformer;
 - All wire sizes.
- 2. Show all over current protection indicate whether breakers are inverse, instantaneous, or non-adjustable.
- 3. Indicate the specific wiring method to be used in all the various areas.
- 4. Show circuitry of all emergency systems and emergency lighting, including fire pumps, elevators, and exit discharge.
- 5. Show details of all wiring and bonding for pools, spes, hot tubs, etc.
- 6. Indicate the type of conductors to be used, copper or aluminum, and their type of insulation and temperature rating.
- 7. Indicate all wire and conduit sizes.
- 8. If neutral is reduced, provide calculations.
- 9. Show all panel locations; indicate working clear ances about all electrical equipment, switch boards and panel boards.
- 10. Provide panel schedules and identify all circuits.
- 11. Provider iserdia grams.
- 12. Show circuitry, wire size, type of insulation and conduit size of fire signal systems.
- 13. Show height of all controls, for compliance with the barrier-free subcode.

Fire protection

- 1. For sprinkler and standpipe systems, specify system type, water supply information, and pipe sizes. Also indicate type of piping and fittings used throughout.
- 2. Provide hydraulic calculations for sprinklers; indicate hydraulic reference points.
- 3. Show measurements between branch lines and heads on lines, and indicate type of sprinkler heads used throughout the system.
- 4. Indicate height and location of all standpipe hose corrections.
- 5. Provide a complete sprinkler system riserdia gram with all perts identified.
- 6. For storage areas, provide hazardous material data sheets on commodities stored as appropriate, including quantity(s) stored.

- 7. Show installation details and location of fire department signess connection to sprinkler/standpipe systems.
- 8. For all suppression and alarm systems, show location of control panel, control valves, detectors, pill stations, strobe lights, aborts witches, fisible links, alarm bells, warning lights, signs, etc.
- 9. If fire pump is to be used, specify capacity and type. Indicate whether electric or diesel powered, and provide all details on diesel fuel supply. Provide details of all piping fittings, control and relief valves, as well as test header details. Indicate method of temperature maintenance for pump and associated equipment.
- 10. For Halon / CO2 systems, show location and type of detectors and nozzles. Show location and size of agent container and piping, as well as types of piping and fittings. Provide system calculations.
- 11. Show details and schematics on all electrical corrections for all fire protection systems, including information on emergency power supplies.
- 12. For barrier-free accessibility, show height of pull stations.
- 13. Indicateall fire alarm area zones.
- 14. For drychemical systems, indicate type of chemical being used. Show size and location of agent containers

 Provide a copy of the installation manual for the system. Provide details on discharge alarms, pipe sizes, and types
 of materials.
- 15. For range hood systems, refer to Mechanical checklist, Item no. 7.
- 16. Provide details on smoke control system as required in Mechanical checklist, Item no. 8.

Elevator

- 1. The building subcode utilizes Standard A17.1 of the American Society of Mechanical Engineers (ASME) as its elevator referenced standard. All elevator related drawings must comply with this.
- 2. Specify elevator type (passanger, freight -specify class of loading, wheel chair manlift, privater esidence, other).
- 3. Show elevator capacity and loading.
- 4. Show size of buffer.
- 5. Indicate speed, travel length, number of landings.
- 6. Show cabdetails, dimensions, door operation, hand rail and control locations to comply with the above noted referenced standard and the barrier-free subcode.
- 7. Show type of drive, giving details of suspension.
- 8. Provide details of emergency operation firefighter's service.
- 9. Showall clearances and quide rail details.
- 10. Provide details of hoistway venting.
- 11. Provide pit details light, accessibility, etc.
- 12. Show equipment layout in the elevator machine room also show light and vertilation.

Barrier-free

The following table is a reference index of items included in the preceding check lists of those releases that are affected by the barrier-free submole:

<u>Partial release</u>	Barrier-free item
Exter ior building	3
Inter ior building	8 and 9
Plumbing	10
Mechanical	13
Electrical	13
Fire protection	12
Elevators	6